

- Edwards, 1920. The Nomenclature of the parts of the male hypopygium of Diptera nematocera with special reference to mosquitoes.—Ann. Trop. Med. Paras. 14, S. 23.
- Frost, H. M. 1932. A comparative study of the male terminalia of Californian anophelines. Journ. of Parasitol. 18, S. 282.
- La Face, L. 1926. Revisione degli Anofelini Italiani.—Rivista di Malariologia 5, pg. 44.
- La Face, L. 1931. Sull'esistenza di razze diverse di *Anopheles maculipennis*.—Rivista di Malariologia 10, pg. 673.
- Martini, E. 1921. Bemerkungen zu Fritz Eckstein.—Zentralblatt f. Bakt. I. Orig. 86, p. 252.
- Martini, E. 1924. Ueber jugoslavische Anophelen.—Archiv f. Schiffs- u. Tropenhyg. 28, p. 254.
- Martini, E. 1930. Culicidae. In: Lindner: Die Fliegen. Stuttgart: Schweizerbart.
- Martini, E. Hackett & Missiroli, 1931. Versuche zum Rassenproblem von *An. maculipennis*.—Archiv f. Schiffs u. Trop. Hyg. 35, p. 622.
- Matheson, 1929. A handbook of the mosquitoes of North America. Springfield and Baltimore. Charles C. Thomas.
- Root, F. M., 1923. The Male Genitalia of some American *Anopheles* Mosquitoes.—Americ. Journ. of Hyg. 3, p. 265.

## CALCARITERMES IN THE UNITED STATES.

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The genus *Kaloterme*s Hagen is divided into a number of subgenera, some of which undoubtedly deserve generic rank. They are all designated as subgenera, however, until more complete biological series of associations of soldiers and winged sexual adults from world collections have been studied.

The subgenera *Calcaritermes* Snyder, *Glyptoterme*s Froggatt, and *Lobiterme*s Holmgren are very closely related in that in the winged adults the median vein runs close to and parallel with the subcostal vein. There are, nevertheless, marked differences in the soldier caste.

Ten species of *Calcaritermes* are known, all from the Neotropical zoo-geographical region, one being from Colima in western Mexico. Species of *Glyptoterme*s have been recorded from the Australian, Oriental, Ethiopian, and Neotropical regions. They are equally well represented in all of these regions except the Ethiopian, where but few species have been recorded. *Lobiterme*s is represented by three species, one from Sarawak and two from South America. No species in any of these subgenera have been recorded from the United States.

Among the insects captured in traps in Florida in connection with a survey of the Mediterranean fruit fly infestation, there

were found three winged adults of a new species of *Calcaritermes*, one insect each from Clay, Levy, and Orange Counties, respectively.

***Kalotermes* (*Calcaritermes*) *nearcticus*, n. sp.**

*Winged adult*.—Head castaneous brown, with scattered long hairs; labrum yellow. Eyes large, separated from lateral margin of head by a distance less than their long diameter. Ocelli fairly large, nearly touching the eyes.

Antennae with 13 segments; second, third, and fourth segments of about the same size.

Pronotum slightly lighter colored than head, with scattered long hairs. Anterior margin of pronotum shallowly concave; posterior margin shallowly and roundedly emarginate, with longitudinal corrugations at base.

Wings irridescently bronze colored, membrane coarsely stippled, margins ciliate. In fore wing median vein running parallel and close to subcosta. In hind wing median branching from subcosta near the base (at 1.5 mm. from base, wing 5.5 mm. in length and 1.60 mm. in width). (Fig. 1.)

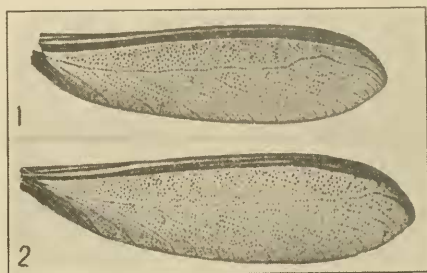


FIGURE 1.—Microphotograph of fore (1) and hind (2) wings of *Kalotermes* (*Calcaritermes*) *nearcticus* Snyder. Enlarged 10 times.

Abdominal tergites with a row of long hairs near base.

Legs with femora swollen and with pulvillus between claws.

The dimensions and details of the wing venation distinguish *nearcticus* from the known species.

<i>Measurements</i> . —Length of entire winged adult.....	7.00 mm.
Length of dealated adult.....	3.50 mm.
Length of head (to tip of labrum).....	1.1 mm.
Diameter of eye (long diameter).....	0.30 mm.
Length of pronotum.....	0.60 mm.
Length of fore wing.....	4.70 mm.
Length of hind tibia.....	0.8 mm.
Width of head (at eyes).....	0.95 mm.
Width of pronotum.....	1.00 mm.
Width of fore wing.....	1.40 mm.

*Type locality*.—Clay County, Fla.

Described from three winged adults, one from the type

locality, collected on April 18, 1930, by A. M. Towles; one from Levy County, Fla., collected on April 21, 1930, by O. L. Milan; and one from Orange County, Fla., collected on January 22, 1930, by P. A. Anslay, Jr.

*Holotype*.—Winged male adult, Cat. No. 44835, U. S. National Museum; two winged adults as autotypes in U. S. National Museum.

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A NEW SPECIES OF MOSQUITO FROM COLORADO  
(DIPTERA, CULICIDAE).

By ROBERT MATHESON.

*Aedes klotsi*, n. sp.

*Female*.—Length 6 to 6.5 mm.; length of wing, 4.5 to 5 mm. Proboscis long, slender, brownish-black; palpi short, one-fifth the length of the proboscis, brownish-black, clothed with small brownish scales and a few short brownish hairs. Antennae about as long as the proboscis, with short brownish hairs forming small whorls; the segments clothed with numerous short, narrow, whitish scales; tori black with numerous white scales. Occiput with a broad median area clothed with narrow, curved white scales bordered with narrow, curved brownish-yellow scales; sides with flat, white scales; erect, forked scales numerous, yellowish-white in the middle and brownish at the sides of the occiput. Mesonotum almost black, clothed with numerous curved scales, yellowish-brown predominating on the median area and whitish to yellowish-white on the sides and anterior margin. Pleura and coxae heavily clothed with broad, flat, white scales. Abdomen brownish-black with broad basal segmental white bands, widening on the sides; venter brownish, densely white scaled. Legs brownish-yellow, the tarsal segments being nearly black; femora heavily white scaled especially on the ventral surface; tibiae with a few white scales intermixed with numerous blackish-brown scales; all tarsal segments black. Claw formula, 1.1 - 1.1 - 1.1. Wing scales all narrow, brownish-black to black.

*Male*.—The general color is practically similar to that of the female. The antennae possess dense whorls of long brownish-yellow hairs. The palpi are slightly longer than the proboscis; the apices of the long segment and the last two segments are blackish-brown; the basal portion of the long segment is yellowish-brown with a more or less distinct ring of whitish scales preceding the black apical part. Length 6.5 mm.; wing, 5 mm. Claw formula, 2.1 - 2.1 - 2.1.

*Hypopygium*.—The structure of the male hypopygium (Fig. 1) readily separates this species from any known North American species. Side-piece more than three times as long as wide; apical lobe long, rounded, with numerous short outward projecting setae on the dorsal face; a few longer hairs arise from the ventral surface. Basal lobe prominent, triangular, the apex projecting upward; the posterior margin of the triangle forms a narrow ridge which bears a single row of long, densely crowded hairs, the outer two of which are rather stout spines; the first spine is short and the second is extremely long and curving